

ANNEX
BETWEEN
THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
GODDARD SPACE FLIGHT CENTER
AND TELOPHASE CORPORATION
UNDER SPACE ACT UMBRELLA AGREEMENT
NO. 32950, DATED _____ (ANNEX NUMBER 01).

ARTICLE 1. PURPOSE

This Annex shall be for the purpose of the rapid detection and characterization of trace chemical compounds of mutual interest to terrestrial and space-based applications, utilizing NASA Goddard's patent pending sensor technologies entitled, Chemical sensors based on 2-dimensional materials, NASA Case No. GSC- 16859-1, Enhancing sensitivity of chemical sensors by integrating with a self-contained pre-amplified printed circuit board, NASA Case No. GSC- 17188-1, and Multi-Functional Sensor Platform Made of Nanomaterials, NASA Case No. GSC-18574-1, which have been licensed to Telophase for the purpose of evaluating the technologies. The Parties intend to integrate these patent pending technologies into the form factor of a device that can be deployed rapidly and has a high level of efficacy in the accurate detection of a variety of chemical compounds.

The collaboration between Telophase and NASA Goddard Space Flight Center as outlined herein, will enable collaboration related to the patented and patent pending chemical sensor technologies identified above that Telophase has licensed from NASA GSFC. In addition, the work contemplated will advance the maturity of the subject technologies and thereby increase the likelihood of their successful infusion into future NASA missions, including Artemis.

The legal authority for this Annex, consistent with the Umbrella Agreement, is in accordance with the National Aeronautics and Space Act (51 U.S.C. § 20113(e)).

ARTICLE 2. RESPONSIBILITIES

NASA will use reasonable efforts to:

1. Coordinate with Telophase to develop mutually agreed upon set of chemical compounds to use as basis for optimization of sensor designs for terrestrial and space-based applications.
2. Provide Telophase access to applicable NASA sensing technology portfolio, including drawings and technical specification documents as well as test data demonstrating the performance of the NASA sensing technology gathered prior to and as part of this agreement.

3. Provide subject matter expertise to Telophase with regard to integration of NASA GSFC sensing technologies with Rapid Testing Breathalyzer (RTB) prototype electronics.
4. Provide necessary Telophase and NASA employee staff access to center facilities while in stages 3 or 4 of Agency Response Framework, as needs arise, during the performance period of this Annex. Access will be subject to NASA safety and social distancing protocols.

Telophase will use reasonable efforts to:

1. Coordinate development of RTB sensor and supporting electronics designs with NASA GSFC Point of Contact (POC).
2. Coordinate with NASA GSFC POC to develop mutually agreed upon set of chemical compounds to use as basis for optimization of sensor designs.
3. Coordinate test methodology and specifications for prototype RTB device with NASA GSFC POC.
4. Build and test RTB prototype device(s) based upon mutually agreed upon set of chemical compounds identified.
5. Provide NASA GSFC access to engineering specifications as built, including all interface control documents.
6. Adhere to all applicable safety and social distancing requirements under the NASA Framework for Return to On-Site Work when working at a NASA campus or facility.
7. Provide materials required in the event of NASA fabrication of sensor chips for which Telophase may retain ownership.

ARTICLE 3. SCHEDULE AND MILESTONES

The planned major milestones for the activities for this Annex defined in the "Responsibilities" Article are as follows:

Identification of chemical compounds of mutual interest for terrestrial and space-based applications (Telophase & GSFC)	1 week from annex execution
Initial prototype sensor build complete (Telophase & GSFC)	10 weeks from annex execution
Performance testing of initial prototype for specific chemical compounds complete (Telophase)	4 weeks from initial prototype build
Characterization and optimization process complete (Telophase)	10 weeks from completion of initial prototype test

ARTICLE 4. FINANCIAL OBLIGATIONS

There will be no transfer of funds between the Parties under this Agreement and each Party will fund its own participation. All activities under or pursuant to this Agreement are subject to the availability of funds, and no provision of this Agreement shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, (31 U.S.C. § 1341).

ARTICLE 5. INTELLECTUAL PROPERTY RIGHTS - DATA RIGHTS

A. Data produced under this Annex which is subject to paragraph C. of the Intellectual Property Rights - Data Rights Article of the Umbrella Agreement will be protected for the period of two years.

B. Under paragraph H. of the Intellectual Property Rights - Data Rights Article of the Umbrella Agreement, Disclosing Party provides the following Data to Receiving Party. The lists below may not be comprehensive, are subject to change, and do not supersede any restrictive notice on the Data provided.

1. Background Data:

The Disclosing Party's Background Data, if any, will be identified in a separate technical document.

2. Third Party Proprietary Data:

The Disclosing Party's Third Party Proprietary Data, if any, will be identified in a separate technical document.

3. Controlled Government Data:

The Disclosing Party's Controlled Government Data, if any, will be identified in a separate technical document.

4. The following software and related Data will be provided to Partner under a separate Software Usage Agreement:

None

ARTICLE 6. TERM OF ANNEX

This Annex becomes effective upon the date of the last signature below ("Effective Date") and shall remain in effect until the completion of all obligations of both Parties hereto, or two years from the Effective Date, whichever comes first, unless such term exceeds the duration of the Umbrella Agreement. The term of this Annex shall not exceed the term of the Umbrella Agreement. The Annex automatically expires upon the expiration of the Umbrella Agreement.

ARTICLE 7. RIGHT TO TERMINATE

Either Party may unilaterally terminate this Annex by providing thirty (30) calendar days written notice to the other Party.

ARTICLE 8. POINTS OF CONTACT

The following personnel are designated as the Points of Contact between the Parties in the performance of this Annex.

Management Points of Contact

NASA Goddard Space Flight Center

Dr. Christyl Johnson

Deputy Director for Research & Technology
Investme

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christyl.johnson@nasa.gov

Telophase Corporation

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Suite 1150

Arlington, VA 22201-3098

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Technical Points of Contact

NASA Goddard Space Flight Center

Mahmooda Sultana

Mail Suite: 592

8800 Greenbelt Road

Greenbelt, Maryland 20771

Phone: 301.286.2158

mahmooda.sultana@nasa.gov

ARTICLE 9. MODIFICATIONS

Any modification to this Annex shall be executed, in writing, and signed by an authorized representative of NASA and the Partner. Modification of an Annex does not modify the terms of the Umbrella Agreement.

ARTICLE 10. SIGNATORY AUTHORITY

The signatories to this Annex covenant and warrant that they have authority to execute this Annex. By signing below, the undersigned agrees to the above terms and conditions.

NATIONAL AERONAUTICS AND
SPACE ADMINISTRATION
GODDARD SPACE FLIGHT
CENTER

TELOPHASE CORPORATION

BY: _____
Dr. Christyl Johnson
Deputy Director- Technology &
Research Investments

BY:  _____
Jamil Husain
Chief Executive Officer

DATE: _____

DATE:  _____